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ABSTRACT

The National School-to-Work Office in collaboration with the National Association for Gifted Children, the Council for Exceptional Children, the Association for the Gifted, and the Council of State Directors of Programs for the Gifted have identified 11 gifted education/school-to-work (GT/STW) models that are either best practices or unique approaches. This information packet provides an overview of one of the best practices models: the Mott Hall School for Advanced Studies in Math, Science, and Technology in New York. This innovative Harlem middle school stresses community-based partnerships and mentoring to develop leaders in mathematics, science, and technology. The Mott Hall School services 450 gifted students (grades 4-8) who are 80 percent Latino, 17 percent African American, and over 60 percent female. The STARS (student apprenticeships in research) model for 7th and 8th graders exposes underrepresented minorities and girls to careers in mathematics and science. In 7th grade, students have scientists as mentors, become proficient in the scientific method of inquiry, and learn about science and technology careers. In 8th grade, 50 students have intensive, 8-month internships with science mentors and college students. The information packet includes a description of the different activities at the Mott Hall School and relevant articles. (CR)

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Gifted Education/School-to-Work Models: Best Practices and Unique Approaches

The National School-to-Work Office has been collaborating with the National Association for Gifted Children, The Council for Exceptional Children, The Association for the Gifted, and the Council of State Directors of Programs for the Gifted on a national effort to identify exemplary Gifted Education/School-to-Work (STW) models. Our purpose has been to forge new relationships between the STW and gifted education communities around common and critical goals: teaching rigorous and relevant academic skills, identifying and developing talent, and guiding career development. We believe sharing these practices will expand learning opportunities for all learners by building an even richer and more inclusive STW system, and by “raising the bar” on learning and teaching for all students.

We use the term “gifted and talented,” which is broader than “academically talented” (used in the School-to-Work Opportunities Act), because state definitions of giftedness mostly use some variation of the current federal definition, which is (1988 Jacob K. Javits Gifted and Talented Students Education Act):

Children and youth who give evidence of high performance capability in areas such as intellectual, creative, artistic or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities.

Last year, letters were sent to state-level STW and gifted education directors and association leaders to help identify gifted education models that also exemplify STW. Submissions were also requested on all gifted education Listservs. We received 23 competitive submissions.

A technical review process was used to ensure that all submissions were thoroughly and impartially evaluated. An outside review panel was assembled which comprised experts in gifted education and STW. Their experience included state gifted education and STW leadership, local STW program evaluation, and post-secondary gifted education research. All submissions were evaluated according to criteria consistent with guidelines made available to all applicants.

Five **Best Practices** and six **Unique Approaches** were selected by the panel. The designation “Best Gifted Education/STW Practice” signifies excellent progress in implementing a comprehensive STW system that challenges high achieving/gifted and talented students. The designation “Unique Gifted Education/STW Approach” recognizes a unique program element. Unique Approaches did not present all key components of a comprehensive STW system (school-based, work-based, and connecting activities), or provide sufficient information about how gifted and talented students are served.

Programs evaluated as very strong:

- specifically serve gifted and talented students;

- demonstrate a school-based learning component that supports and builds on a work-based learning component, and provide students with high level academic and technical skills and opportunities for career exploration and guidance;
- demonstrate a work-based learning component connected to academic classroom learning, and prepare students for the diverse skills needed in today's high-performance workplaces;
- present connecting activities that build and maintain linkages between students, educators, the workplace, parents, and others in the community;
- provide evidence about effectiveness, including indicators that it could be replicated in diverse settings throughout the country; and
- address identified priorities such as strategies to: improve math and science achievement, serve gifted students in rural and urban areas, enhance middle school achievement, and promote linkages with institutions of higher learning.

The following is a brief description of one of the five **Best Practices** selected:

THE MOTT HALL SCHOOL FOR ADVANCED STUDIES IN MATH, SCIENCE, AND TECHNOLOGY (NEW YORK): This innovative Harlem middle school stresses community-based partnerships and mentoring to develop leaders in mathematics, science, and technology. The Mott Hall School (P.S./I.S.223) serves 450 gifted students (grades 4-8) who are 80% Latino, 17% African American, and over 60% female. Students are from mostly poor households but are determined learners and expected to succeed. For 10 consecutive years, the school has ranked among the leading New York City public schools.

The STARS (student apprenticeships in research) model for 7th and 8th graders exposes under-represented minorities and girls to careers in mathematics and science. In 7th grade, students have scientists as mentors, become proficient in the scientific method of inquiry, and learn about science and technology careers. Student presentations at a school-wide science fair are the culminating activity of the year. In 8th grade, 50 students have intensive, eight-month internships with science mentors and college students from City College of New York science departments (Engineering, Biology, Chemistry, and Biomedicine) and Columbia University's School of Medicine. Teachers help scientists and students successfully interact with each other. Students learn about laboratory techniques, science concepts, and safety issues in a working science lab. They gain self-confidence by assisting on science projects, and are exposed to career choices in science, medicine, and engineering.

The Mott Hall School also offers 7th and 8th graders a Community Service Learning Program that enables 75 8th graders to participate in projects related to shelter, health, jobs, nutrition, education, and aging. Students learn to address social issues, and are introduced to careers in the not-for-profit sector. Through on-site and leadership training, they gain valuable skills such as teaching, writing, public speaking, counseling, management, problem-solving, decision-making, professional dress and image, and conflict resolution. Eighth graders must participate in one of

these two programs; 75% choose community service. Both incorporate student assessment strategies such as videotapes, evaluation instruments, and reflective journals.

CONTACT INFORMATION

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Mr. Mark Briller, Gifted and Talented Coordinator, (212) 927-9466/7.

**Mathematics, Science, and Technology
for Gifted and Talented Students**

— P.S./I.S. 223 —
**The
Mott Hall**
School



The Mott Hall Intermediate School, located in the Harlem/ Washington Heights section of New York City, is dedicated to the academic and personal development of students who will become tomorrow's leaders. In the classrooms and corridors of Mott Hall, a dynamic educational process- shared by innovative teachers and eager students- reflects the dedication to empowerment and love of learning that underlines the School's mission and spirit. By offering academic and life skills training for the whole child, Mott Hall graduates become life-long learners and doers.

The Mott Hall School New
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PROFILE



What is Mott Hall School?

Mott Hall is a science, technology, and math magnet middle school, in New York City's Community School District Six. The Washington Heights, Harlem school has the largest number of bilingual students (90% Hispanic) of any school in the New York State and one of the largest in the country.

Mott Hall is dedicated to the academic and personal development of students who will become tomorrow's leaders. In the classrooms and corridors of Mott Hall, a dynamic educational process—shared by innovative teachers and eager students—reflects the dedication to empowerment and the love of learning that underlies the School's mission and spirit. By offering academic and life skills training, Mott Hall graduates become independent and inquisitive young people on the path to being life-long learners and doers.

What makes Mott Hall a successful school?

It's the combination of eager students and great teachers. Janice Gordon, a teacher of Humanities at Mott Hall, has had tremendous success with introducing technology among the 6th graders in her class. Through the Anytime Anywhere Learning program sponsored by Toshiba and Microsoft, each child was empowered with a laptop computer at a reduced cost. Using the laptop computers, parents and teachers have found students are not only learning more and becoming more responsible, but they're also exercising critical thinking skills in ways that were inconceivable just a year before.

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With an assignment on African rivers, Ms. Gordon's students used a variety of Microsoft® productivity applications to create a project. Some students used the mapping features in Excel to add geographical context to their projects, some pasted clipart into Word, and others used Internet Explorer to find facts and pictures of the Nile River region on the Web. Regardless of the approach, students were excited to create and share their presentations to their classmates using PowerPoint®.

Several projects have enabled students to go beyond the classroom to find answers to their questions. One example is when the students started a project on Chemiluminescence. They found a scientist on the Web performing University-level research on the same subject and communicated with him using e-mail. The students sent questions that were enthusiastically answered with suggested experiments for them to try on their own.

Regardless of the assignment, teachers at Mott Hall are reporting tremendous improvement in the quality of work turned in as a result of technology in the classroom and home. In addition, teachers report their students are showing greater enthusiasm for learning, better retention, and higher self-esteem.

The software that makes it happen:

Windows® 95 is the operating system on which the kids begin to familiarize themselves with a variety of productivity and multimedia applications.

Office 97 contains the applications that both the teachers and students use to create and present their work.

- Word
Used by students for their reports, it enables them to concentrate on the content. They are able to write their ideas and thoughts as they come, knowing they can always go back to make corrections, much more easily than with pen and paper. Working collaboratively in Word, classmates will highlight words or phrases that may seem awkward and make words bold that are misspelled. Though Word is mostly for writing, the students have also learned how to use its versatility by inserting photos or drawings into their papers.
- Excel
Students enjoy creating charts with the Chart Wizard. The mapping function is also commonly used to add context of which country they may be using for class projects. They have also learned how to use Excel's mathematical features to help them to find averages, add columns, etc.
- PowerPoint
Students and teachers create dynamic presentations for the class with this application. They consider PowerPoint a blank canvas for their ideas and a tool that helps them organize their thoughts. In PowerPoint, they add color, change

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fonts, design slides shows, and draw their own pictures.

With the help of Internet Explorer, students are encouraged to find information they can use in their school work, on the Web. They love going out to the Web and exploring the world at their fingertips.

[Home](#) | [School Profile](#) | [Student Work](#)

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Last Updated Wednesday, April 20, 1998

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THE MOTT HALL SCHOOL
West 131st and Convent Avenue

For Advanced Studies in Math, Science & Technology
New York, New York 10027

Dr. Mirian Acosta-Sing
Principal

April 20, 1998

Ms. Lorraine Kleinwaks
c/o National School-to-Work Office
400 Virginia Ave. S.W. Suite 210
Washington, D.C. 20024

Dear Ms. Kleinwaks.

Please find enclosed overviews of two Mott Hall programs which we believe to be exemplary science and community service curricula models .

We believe that the programs which we have described and are submitting for consideration meet the criteria set forth in the memo entitled, Linking Gifted and Talented Students With School-to Work.

These profiles describe the visions and goals of the programs. We have indicated the important roles of various community based partnerships and the purposes of mentors in connecting the student, the school, and the workplace. It is our belief that these programs demonstrate innovative ways time is restructured to enable students to participate in high level School-To Work learning experiences; while still meeting state graduation requirements, and innovative ways graduation standards are being changed, to reflect work-based learning and assessment.

Should you have any questions please do not hesitate to contact me .

Sincerely,



Dr. Mirian Acosta-Sing

Dr. Mirian Acosta-Sing
Principal

LINKING GIFTED AND TALENTED STUDENTS WITH SCHOOL-TO WORK: A GIFTED EDUCATION/STW SYMPOSIUM PROJECT.

School Background

The Mott Hall School (P.S./I.S. 223) is a school of approximately 450 students in the 4th through 8th grades with a focus on advanced studies in Mathematics, Science and Technology. Our student ethnic population consists of 80% Hispanic, 17% African American and 3% other, with 60% of our overall population being female. Our school is dedicated to the academic and personal development of students who we believe will become tomorrow's leaders. Within the classrooms and corridors of Mott Hall, a dynamic educational process is shared by eager students and innovative teachers. This process reflects the dedication to empowerment and love of learning that underlie the School's mission and spirit.

The mission of The Mott Hall School is to create leaders in Mathematics, Science and Technology while developing independent, self-reliant, life long learners. The school's instructional program is designed to provide students with tools they need to accomplish their goals. In spite of many social and economic obstacles, the students of our school are encouraged and expected to succeed.

All learning at Mott Hall takes place in the context of the age of technology into which our students were born and in which they will someday lead. Computers, telecommunications and media technology are applied whenever possible in the delivery of curricula and enrichment activities. Technology is a tool used daily by students, whether researching historical figures, developing math or science projects, writing plays, or playing chess via E-mail with international opponents.

Throughout their stay at Mott Hall, all students are held to the standard of our motto: Striving for Excellence; Positive Attitudes, Hard Work, Creativity, Success, Power, Recognition.

The teachers at Mott Hall share an enthusiasm for the potential of their profession to make a real difference in the lives of children. Mott Hall staff members enjoy working together and are actively involved in grade teams. Such teams jointly develop and implement interdisciplinary curricula units. Teaching occurs on many advanced levels of cognition in varying instructional modalities. Students enjoy classes and are very active in their own learning as well as in their communities. Our Service Learning Program and Pre-Westinghouse Mentor/Mentee Programs as well as our partnerships with many community businesses and organizations are designed to expand the student's world.

The Mott Hall philosophy of educating the whole child is realized through innovative courses which provide academic challenge and cultivate personal initiative. Differentiated programs beyond the basics prescribed by the State of New York, broaden students' knowledge while simultaneously stressing the skills to question, apply and generate information and solve problems creatively.

Our approach to course work is aligned with the precept that interdisciplinary curricula, utilizing team-teaching and stressing theme studies and real world hands-on experiences are the most effective means of stimulating and engaging middle school students. Interdisciplinary units based on themes relating specifically to Mathematics, Science and Technology are developed by grade teams and the expertise of individuals from community based organizations who act as both content experts and student mentors. Such units deal with concepts and themes as Rocketry, Urban Woodlands, HIV/AIDS, Nuclear Energy, The World War II Holocaust and The Life of Leonardo da Vinci. These studies lead students on paths of guided inquiry which require high level critical thinking and active problem solving.

Course work at Mott Hall demands team participation and individual creativity and results in tangible products that grow directly from the students' interests, such as plays, poetry, music, newsletters, journals, art work and videos, as well as written and visual documentation of data analysis and debates on historical and current events. Presented to classmates, parents, mentors and published on our Mott Hall Website, these products ensure a broad audience for students' endeavors, increasing recognition for students growing confidence in their ability to synthesize and present information.

MOTT HALL PRE-WESTINGHOUSE MENTOR/MENTEE PROGRAM

Purpose of project :

At Mott Hall every opportunity is sought to introduce our students to the world of work in careers related to Mathematics, Science and Technology in which minorities and girls are under-represented. The purpose of this Mott Hall Pre-Westninghouse Mentor/ Mentee program allows us to enrich our grade seven science curriculum and to pave the way for these students to participate in our grade eight Pre Westinghouse Mentor/Mentee Internship Work Based Program.

Seventh Grade Component :

To succeed in a rapidly changing scientific and technological world our Mott Hall youngsters must possess sound technical and scientific literacy. Through participation in our seventh grade component of The Mott Hall Pre-Westninghouse Mentor/Mentee Program, students will:

- Learn about career opportunities within the field of science/technology.
- Become proficient in the scientific method of inquiry and experimentation.
- Become aware of the importance of science in so many areas of everyday life..
- Become creative problem solvers through the use of the learned and exercised skills of inductive and deductive logic, observations and writing and presentation skills.

This component of our program stresses experiential learning, with students gaining insight from their own class research and experimentation. It requires that students fully understand and apply the scientific method practiced by professionals from devising a hypothesis, to gathering data through experimentation, to analyzing this information. Under the mentorship of appropriate science professionals our students will be taught to be scientists. The culmination of these in-depth independent investigations by our students are presentations at our school-wide science fair.

Eighth Grade Component :

Approximately 50 students in grade eight are offered the opportunity to participate in a one year internship program. This internship with a science/technology based community organization (City College School of Science) affords our students the opportunity of studying laboratory strategies and techniques within a real life science laboratory.

Students are assigned an on-site mentor whose role it is to guide our Mott Hall mentee through numerous year long science/technology related laboratory experiences. These activities include assisting the mentor with procedures related to the on-site mentor's research and as a result participating students will:

- Have a greater understanding/appreciation of the inquiry research process.
- Gain self confidence by assisting on a high level science project.
- Be encouraged to pursue a career in science/technology.
- Be encouraged to pursue higher level science/technology investigations through the Westinghouse Science Scholar Competition while in high school.
- Have students contribute solutions to real world problems.
- Develop peer group support for hard work and excellence in science and technology.

Statement of need :

Reports issued over the last decade (A Nation at Risk, Educating Americans for the 21st Century, Women and Minorities in Science and Engineering, etc.), all indicate declining student aptitude and interest in science and mathematics and project an American work force unable to meet this nations long term needs. Labor projections for the year 2000 (Office of Economic Growth and Employment and SCANS Report for America 2000), indicate a continuing shift towards technological sophisticated industries and services so that the entire work force will have to have basic technical, mathematical, and scientific literacy.

Early intervention is needed with today's youth to help them understand the need for continued math and science education throughout their schooling to ensure the broadest possible career paths remain open to them.

Our Mott Hall Pre-Westinghouse Mentor/Mentee Program offers our students the opportunity to experience real meaningful science learning in a community based laboratory with the assistance of a mentor. Such an experience will provide each student with information necessary to make informed choices concerning their future high school participation in the Westinghouse Scholars Competition Program and future career choices.

Grade Eight Student Training

Students participate in an overall orientation program that focuses on the objectives of the program. These training sessions are coordinated and planned by the teacher overseeing the project. Guest speakers and potential mentors from participating (City College) agencies speak to students about their research and fields of study. Specific training sessions are conducted by teachers from our school and guest speakers who give small groups of students the opportunity to maximize interaction. While there is an intensive orientation at the beginning of the school year, on-going training is provided to the students, especially in the areas needed as expressed by students via the program's reflective and evaluation component.

Students also receive intensive training in the laboratory setting which they select. This training involves lab procedures related to safety issues. Defining the students roles in the lab. Methods of keeping a reflective/science journal. The use of science libraries and the internet as a tool for research.

The training also includes generic topics such as communication skills and building relationships which are extensively discussed and lead by corporate business volunteers who work within Mott Hall in numerous other capacities.

The Service Site

Students are actively involved in their lab site for a period of eight months during the school year. Sites include mentors in City College Schools of Biology, Chemistry and Engineering. Students are placed in a setting that offers a safe and structured environment for developing the skills necessary for them to continue their science explorations while in high school and hopefully decide to apply for the Westinghouse Scholars Program. Our students' mentors supervise and observe each participating student. Evaluations are part of the program to determine the skills and growth of individual students. Each site is carefully selected for staff willingness to monitor our participating students. We support the ongoing efforts of the site mentor by developing ongoing meetings of mentor/mentees in order to discuss student progress.

Reflection

This element of the program is one of the most important program components. Students have the opportunity to reflect on their work site experiences. They receive guidance from their Science teacher who helps students understand the impact of their work experiences. Students are given a Pre-Westinghouse Journal to write about their weekly experiences. Reflective seminars are conducted to discuss individual reflections and learning. The seminars allow the students to explore alternate solutions and approaches to situations that occur at the work site. This activity allows the student the opportunity to see in a substantive context the relationship of their work as being genuine experiences, and to relate their learning to their school curriculum. Through the reflection activities students develop and hone communication and problem solving skills.

Program Evaluation Plan

There is an on-going program evaluation plan which consists of documenting students' work at their site via photographs and video tapes. Instruments have been developed by a team of teachers and the program coordinator to get feedback from the mentors and the students on the various aspects of the project. The reflective journal written by the students also serves as an evaluation tool to read the comments and sentiments of the students about their work and science exploration experiences. Students also produce a project based on the work that they are doing at their site. This project is presented at our Mott Hall School Science Fair.

In summary the participating students in this Mott Hall Pre-Westinghouse Mentor/Mentee Program learn research, thinking, writing and problem solving. More importantly the students are motivated to continue their quest in high school for further technical and science research, which we hope will lead to a career choice in the area of the sciences.

**Leadership Project
For Mott Hall School Students
Introducing Young Adolescents to the world of work
Via A Community Service Program**

Purpose of Project:

The purpose of our Learning Service Program for Young Adolescents allows a group of 50 eighth grade students to undertake community service in their immediate communities. The overall goal of the program provides an opportunity for young adolescents to assume meaningful, contributing roles in their communities. The program also provides participating students with a chance to apply knowledge and skills learned in school in the real world of work.

Through students' volunteer participation in community based agencies, the program seeks to meet the following:

- Create a sense of self-worth and confidence in the student volunteers
- Create a sense of civic pride in the students
- Create a sense of continuing community service in the student volunteers
- Enable students to explore possible career fields
- Introduce students to challenging experiences tied to the world of work
- Strengthen and supplement local efforts in resolving human, social and environmental problems

Statement of Need:

Service learning is a unique form of Community service that connects classroom learning to real world experiences. Community based organizations reach out to adolescents creating for them a positive role in their communities. The program combines meaningful volunteer work with training and on-going reflection which allows students to achieve a sense of accomplishment by working in various areas of community life.

Mott Hall is committed to this concept of Community Service which we believe results in building self-esteem for our eighth grade students. Through service learning experiences which address community problems and issues, the Student Community Service program expects young adolescents to gain an appreciation of the importance of community-wide, problem-solving efforts.

The student volunteers gain valuable career skills such as teaching, writing, public speaking, counseling, tutoring, organization and management through on-site training. They learn the value of helping others and increase their awareness of local and global problems by serving as tutors to younger children, mentors to peers, and companions to senior citizens. Participating students work in teen centers, aids hot lines, homeless shelters, and many other settings. They address issues and problems associated with shelter, health, jobs, nutrition, education, aging, and crime prevention.

Training Component

There is a need to provide training sessions on leadership skills in an effort to prepare the students for their community service. These training sessions focus on the following life-long skills.

- Effective communication
- Problem solving abilities
- Goal-Setting
- Leadership skills (professional dress and image)
- Collaborative decision-making skills
- Conflict resolution
- Reflective Writing

Overall, by making effective use of student volunteers, many community agencies can maintain or increase the delivery of much needed social services. However, the overall objective of the program is to focus on getting our adolescents to acquire the aforementioned life-long skills which they need in order to be productive citizens.

Students participate in an overall orientation program that focuses on the objectives and procedure of the program. This orientation is organized and conducted by the teacher who has been assigned coordinator of the project. Guest speakers from the community based agencies speak, including community leaders. Specific training sessions conducted by teachers in the school, guest speakers and our school principal are given in small groups of 20 for maximum interaction. The training sessions are interactive using role-playing, simulations and case study techniques. While there is an intensive orientation at the beginning of the school year, on-going training is provided to the students, especially in the areas needed as expressed by students via the program's evaluation instruments.

Students also receive intensive training in the community service area they chose. This training includes substantive learning about the developmental characteristics and needs of the age group-either senior citizens, preschoolers, or younger school-age children-with whom they are working. For example, if they are serving at a senior center they learn about the effects of aging and issues facing the elderly. If their placement is at a day care program, they explore early childhood development. Students also are encouraged to research their area of interest by reading articles and books.

Community Service Site

Students are actively involved in their community service work for a period of seven months during the school year. They are placed in a setting that offers a safe and structured environment for developing interpersonal skills. There is a mentor at each community service site who supervises and observes the students. Evaluations are part of the program to determine the skills and growth of individual students. Each community agency is carefully selected for their willingness to monitor the participating students.

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Reflection

The third element and one of the most important program components is the opportunity for the students to reflect on their work site experiences. They receive guidance from the Language Arts teacher who helps students understand the impact of their experiences. Students are given a Community Service Journal to write about their weekly experiences. Seminars are conducted to discuss individual reflections and learning's. The seminars also allow the students to explore alternate solutions and approaches to situations that occur at the work site, to continue their study of human growth and development in a substantive context relating to genuine experiences, and to relate their experiences to their school curriculum. Through the reflection activities, students develop and hone communication and problem-solving skills.

Program Evaluation Plan

There is an on-going program evaluation plan which consists of documenting students working at the centers via camera pictures and video tapes. Instruments have been developed by the Principal and program coordinator to get feed-back from the mentors and the students on the various aspects of the project. The reflective journals written by the students also serve as an evaluation tool to read the comments and sentiments of the students about their community service experiences.

In summary, the participating students in this leadership Project important skills in research, thinking, writing, public speaking, and problem-solving. More importantly the students also learn that they do make a difference in their communities. They learn firsthand from community action and from performing a variety of services that are vital for productive community life.

This leadership project is based on the premise that today's youth are resources and producers who are valued, needed, respected and acknowledged.

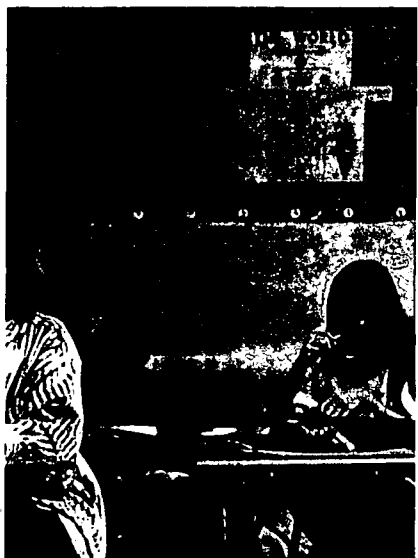
The Mott Hall School

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**The Mott Hall School:
Positive Attitudes,
Hard Work,
Creativity,
Success,
Power,
Recognition.**

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The Mott Hall School is dedicated to the academic and personal development of students who will become tomorrow's leaders. In the classrooms and corridors of Mott Hall, a dynamic educational process – shared by innovative teachers and eager students – reflects the dedication to empowerment and love of learning that underlie the School's mission and spirit. By offering academic and life skills training for the whole child, Mott Hall graduates independent and inquisitive young people on the path to being life-long learners and doers.

All learning at Mott Hall takes place in the context of the age of technology into which our students were born and in which they will someday lead. Computers, telecommunications and media technology are applied whenever possible in the delivery of curricula and enrichment activities. Technology is a tool used daily by students, whether researching historical figures, developing math software, writing plays, designing rocketry, documenting presentations or playing chess via E-mail with international opponents.



At Mott Hall, we provide a wide range of intellectually challenging academic experiences designed to promote the development of students who are well prepared and highly motivated to pursue future leadership positions in mathematics, science and technology.

Dr. Mirian Acosta-Sing,
principal

Located in Central Harlem, Mott Hall's students are drawn from District Six – North Harlem, Washington Heights and Inwood.

Preparing students for lives as effective, productive adults means fostering skills in both cooperation and competition. Teamwork is the basis of many projects and programs at Mott Hall, just as competition for prizes and awards is encouraged and celebrated. Many activities – such as science fairs, the chess team and the annual Morgan Stanley business project – combine the two, animating the value of collaboration and building self-esteem through recognition and reward.

Mott Hall's limited enrollment means that students receive the individual attention they need in order to thrive. In an atmosphere like that of a family, both caring and firm, students are challenged by a rigorous scholastic program and nurtured by activities that address their developmental progress from child to adolescent. Throughout their stay at Mott Hall, all students are held to the standard of our motto: Striving for Excellence: Positive Attitudes, Hard Work, Creativity, Success, Power, Recognition.



Faculty

This is a place where minds meet – where students, teachers and administrators come together in the name of intellectual excellence.

*Giulia Cox,
teacher*

The teachers who are drawn to Mott Hall share an enthusiasm for the potential of their profession to make a real difference in the lives of children. The School's small population means that faculty members and students all know one another and work together in an atmosphere of trust and respect. As they bring fresh thinking to the classroom through novel instructional methods, Mott Hall's teachers not only encourage creativity and critical thinking, but self-discipline and responsibility as well. Their commitment to their work is inspirational, and their dedication extends far beyond the normal school day. Many programs and projects, such as Service Learning and most interdisciplinary curriculum units, have been the result of teacher-led initiatives.

Academic Program

The Mott Hall philosophy of educating the whole child is realized through innovative courses which provide academic challenge and cultivate personal initiative. Differentiated programs, beyond the basics prescribed by District Six and the State of New York, broaden students' knowledge while simultaneously stressing the skills to question, apply and generate information. Courses and enrichment activities within and beyond the regular class schedule reach into the city, linking students to the world of work, the natural environment, community service, the arts and higher education.

Our approach to course work is aligned with the precept that interdisciplinary curricula, utilizing team-teaching and stressing theme studies, is the most effective means of stimulating and engaging middle school students. Interdisciplinary units, developed using the Heidi Jacobs model, are offered for the upper grades and based on themes relating specifically to Mathematics, Science and Technology. Concepts and topics such as rocketry, urban woodlands, HIV/AIDS, nuclear energy, and the life of Leonardo da Vinci, lead students on paths of guided inquiry which require high-level critical thinking and active problem-solving skills. Units encompass all curriculum departments and include study in related

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scientific areas, such as genetics, biology, environmental science, geology or computer science.

In addition, departmental curricula use a cross-disciplinary approach as well as active learning techniques whenever possible. For example, seventh grade Mathematics students study Islamic art in pursuit of understanding geometry. The hands-on design, construction and launching of rockets introduce students to Newton's Three Laws of Motion and the basics of trigonometry. A Communications Art course in personal reflections uses novels and plays about children that resonate with our students' own progress into adolescence.

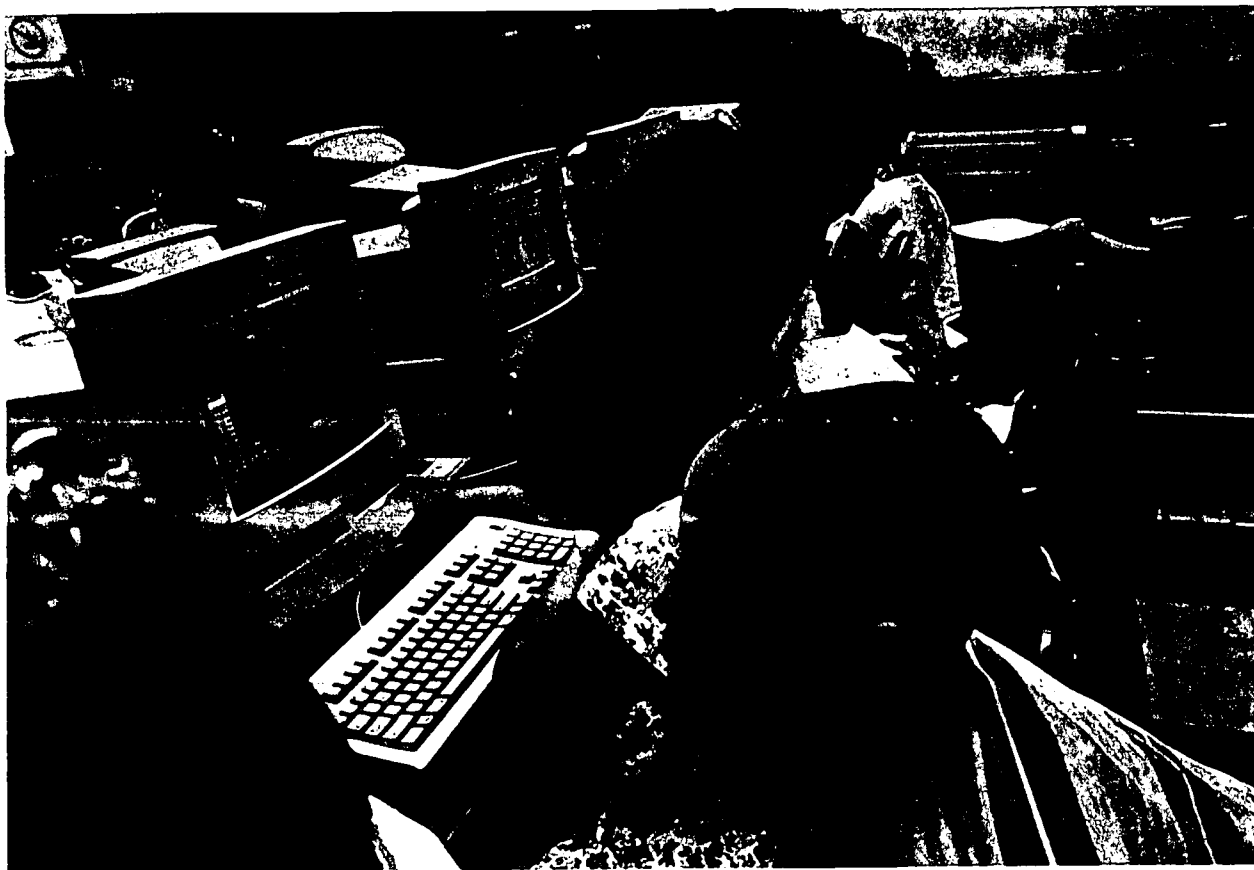
Course work at Mott Hall demands team participation and individual creativity and results in tangible products that grow directly from the students' interests, such as plays,

poetry, music, newsletters, journals, artwork and videos, as well as written and visual documentation of data analysis and debates on historical and current controversies. Presented to classmates, school-mates, parents, mentors and others in the community, these products ensure a broad audience for students' endeavors, increasing recognition for students' accomplishments and supporting students' growing confidence in their ability to synthesize and present information.

Every opportunity is sought to introduce our students to the world of work in careers related to Mathematics, Science and Technology. Students initiate projects and meet with professionals in fields such as architecture, banking, electronics, law, business, design, engineering and medicine. Students are also introduced to various career options in the not-for-profit sector as they provide meaningful volunteer service to the community in which they live.

Interdisciplinary studies at Mott Hall are based on themes related specifically to Math, Science and Technology, and have included units on rocketry, urban woodlands, HIV/AIDS, nuclear energy, and the life of Leonardo Da Vinci.

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Technology

Contemporary technology is integral to instruction at Mott Hall, not to replace curricula, but to most effectively deliver curricula to students.

Students and teachers have access to computers throughout the school, enhancing research, analysis, reflection, communication and self-expression. Video equipment is available for the production of student projects, with the future possibility of converting video-works to digital media for posting on-line.

Mott Hall is one of 150 schools nationwide selected by Teachers College and the Environmental Defense Fund to help develop an interdisciplinary curriculum on environmental studies. As part of this pioneering project, Mott Hall students are linked to the InterNet's World Wide Web. This capacity connects our students and teachers to an extraordinary array of informational resources, including universities around the globe, and increases the potential for a range of E-mail communication.

Mott Hall is one of 150 schools nationwide selected by Teachers College and the Environmental Defense Fund to help develop an interdisciplinary curriculum on environmental studies.

Mentoring

The influence of positive, adult role models, whether through teaching, tutoring, coaching or just talking, is available to every Mott Hall student. Mentoring programs in the service of academic support, career awareness and personal encouragement help our students achieve their goals in middle school and far beyond.

The STEP Program provides students with hands-on, state-of-the-art laboratory experience at the City College Departments of Engineering and Biomedicine and the Columbia University School of Medicine. Under the direction of faculty and college students, students use the scientific inquiry method to explore concrete and abstract science concepts. Working directly with practitioners in the fields, students also learn about career choices in medicine and engineering.

The Career Awareness Program introduces the myriad career choices that await our students as it acquaints them with basic business skills. Each week, a group of volunteers from Morgan Stanley & Co. visit the School to teach a

class in the fundamental concepts of business, finance and economics. The class culminates in the spring when the students apply the concepts they have learned to the formation and operation of their own small business. In past years, student entrepreneurs have successfully created a key chain company, a tee shirt business and a cookbook publishing venture. In addition, Morgan Stanley sponsors open discussions between students and guest speakers, such as doctors, architects, lawyers, journalists, musicians, professors and advertising executives.

Street Project is a flexible volunteer program designed to meet the School's specific needs for mentoring and support. Mentors from Street Project, who are analysts from New York City investment banks and management consulting firms, have become part of the Mott Hall family, returning each year to lead study circles, teach economics and tutor students as they prepare for high school entrance exams. Every Saturday throughout the school year, Street Project mentors organize a field trip or service outing for Mott Hall students and their parents – to science centers, museums, parks and community organizations – trips that connect students in a purposeful way to diverse aspects and populations of the city in which they reside.

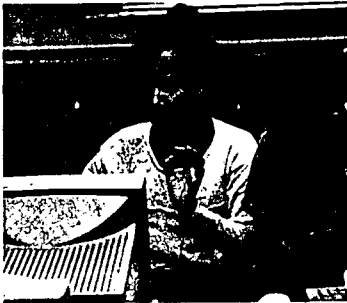
Support Net, a project of the Harlem Educational Activities Fund, is a unique program that continues mentoring support beyond middle school by matching Mott Hall graduates with mentors who follow them throughout their high school careers. In addition to tutoring, mentors assist with college research, including investigation of sources of scholarships and grants. Support Net volunteers also organize group social events and produce a newsletter for the program's participants.



Enrichment

The learning never stops at Mott Hall. Programs take place within the school day and inside the school walls, as well as beyond the class schedule and outside the classroom environment. Some enrichment programs, such as the Chess Team or public speaking, originate within the School, while others are offered by agencies and organizations such as the Central Park Conservancy, CNN, The Harlem School of the Arts and Facing History. Whether playing tournament chess, analyzing the water of the Hudson River on-site, performing on stage with the National Dance Institute, or editing poetry for publication, the goal of all enrichment programs is to expose students to new life experiences, thus encouraging them to expand their own dreams.

Enrichment has found a particularly in-depth meaning with the Mott Hall Chess Team. Founded in 1992 under the direction of International Chess Master Maurice Ashley, the Blazing Bishops quickly began to take local and national championship titles, including back-to-back national titles. Team members have chess lessons during school hours and travel to local tournaments on weekends. They instruct younger students at Mott Hall and at neighboring P.S. 76 in chess, sharpening their presentation skills and developing empathy for younger students. In addition, team members publish a monthly chess newsletter that is distributed throughout the School.



Mott Hall is tangible evidence that all children, from whatever socioeconomic background, once given the opportunity to learn in an environment conducive to that end, can and will achieve.

*Anthony Amato,
community superintendent*

Every aspect of participating on the chess team carries over into students' work and encourages attitudes and skills which are mandatory for success in life. The practice of chess requires study, reasoning, logic, patience and creativity. It hones students' concentration and decision-making skills as it teaches them how to make good choices after considering different options. Winning at chess takes time, which underscores the value of delayed gratification and the necessity of searching for the reasons behind one's mistakes. A metaphor for all student endeavors, in chess, the process is at least as important as the result.



Mott Hall's limited enrollment of 400 means that students receive the individual attention they need in order to thrive.

One always comes back to Mott Hall with a feeling that what you have to say will be desired, respected and appreciated. There is a real passion for learning at Mott Hall.

*Morris Ashley,
chess coach*

Learning at Mott Hall is learning at its best.

*Gerald Freund,
Pro Bono Ventures, Inc.*



Dr. Mirian Acosta-Sing, principal.

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Service Learning

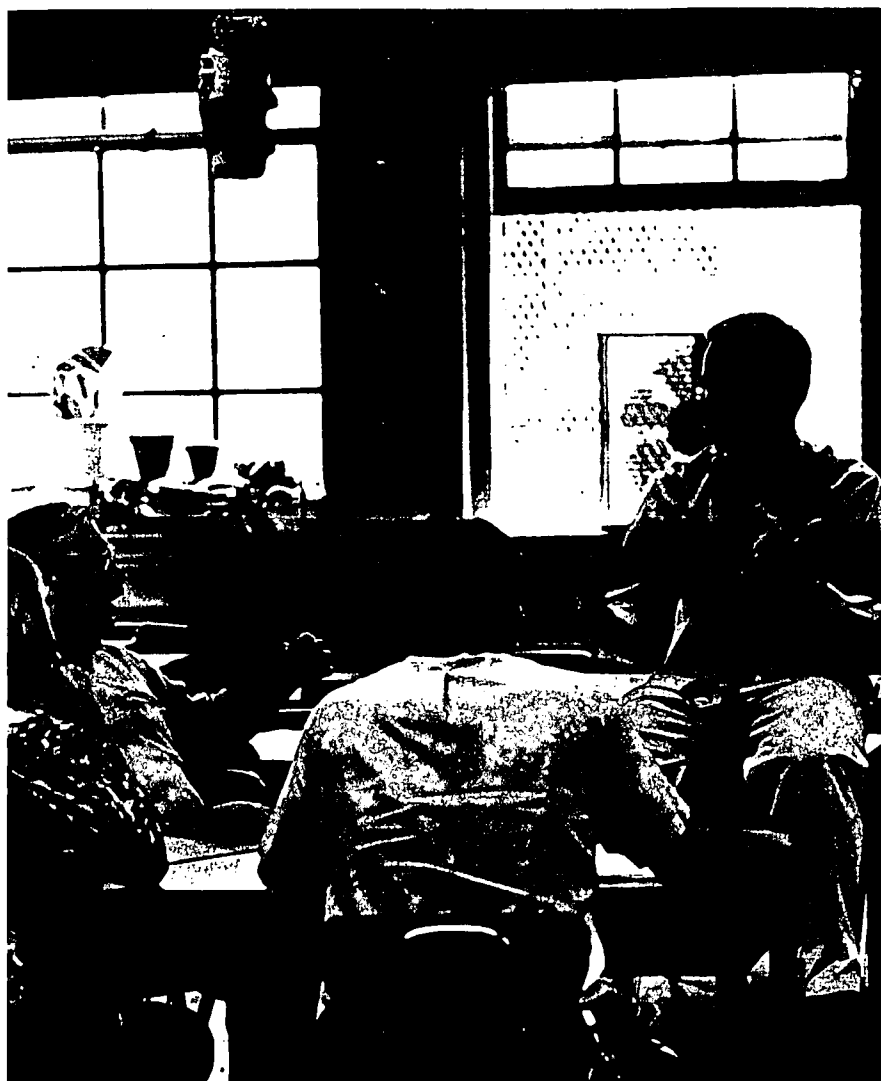
Adolescents have a vital need to connect classroom learning to their experiences in the world outside of school. At the same time, they need to feel they have a contribution to make in their community. Service Learning, a critical part of every student's education at Mott Hall, fulfills these needs. While answering a critical manpower shortage within the nonprofit community, Service Learning contributes to students' personal growth by broadening their awareness of the world and encouraging compassion, courtesy, altruism and civic pride.

Students receive intensive instruction in the community service area in which they choose to work, including the developmental characteristics and needs of the age group served by the agency. They are prepared to enter the working world by examining topics such as communicating with supervisors, understanding job responsibilities, resolving conflict, respecting confidentiality, dressing appropriately, and building relationships with co-workers and agency clients.

Each work site provides a safe, structured environment as well as an on-site mentor who supervises and observes the student at work. Weekly on-site evaluations and a formal year-end assessment provide students with insight into the progress of their work skills and personal growth. Over 25 sites have participated in the program, including the Isabella Geriatric Center, Fort Washington Library, the Museum of Modern Art, Hearts and Voices, the Mennonite Head Start Center, the district office of Assemblyman Brian Murtagh, and other public schools in District Six.

A critical component of Service Learning is the students' ability to reflect on their service. Students complete a Community Service Journal, which guides them in writing weekly about their performance and its impact on their development. Seminars are conducted in which students discuss individual reflections, explore alternate approaches to situations that occur at work, continue their study of human development, and relate their experiences to curricula.

Through meaningful volunteer participation in community-based agencies, students make a direct contribution to society as they are given the opportunity to apply newly-acquired work skills in a professional setting. Most important, students learn that they can make a difference in their communities, while those whose lives they touch learn that today's youth are a valuable resource whose interests and talents need to be acknowledged and respected.



Mott Hall offers a progressive education which prepares the students for higher education and the world of work.

*Ana Rosario,
teacher/parent*

At Mott Hall expectations are high. Teachers work together to support the needs of our students. We are always developing strategies which make students rise up to our high expectations.

*Harvey Augenbaum,
teacher*

Parental Involvement

An nurturing atmosphere at home is mandatory to students' success in school. Many Mott Hall students are part of families who have recently immigrated to the United States. They strongly believe in the power of education to better their children's prospects for the future and eagerly assist their children's learning process.

Mott Hall has an active Parents Association, with parents participating in curriculum orientations, enrichment projects, and fundraising for the School. Parents take part in workshops and field trips to develop their own skills in reflective learning, improve their relationships with their children and increase their positive feelings about the school community as well as the wider community in which they live.

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Recognition and Support

The accomplishments of our students – who seize the opportunities offered and consistently perform at high levels in all subjects – have brought acclaim for Mott Hall from many sources. For 10 years in a row, Mott Hall has placed first out of 620 New York City public schools, with 100% of students reading at or above grade level. 99% of our students perform at or above their age/grade norm in Mathematics. Awards garnered for student efforts have included numerous New York City Science Fair awards, citywide and national chess championships, and the 1992 National Amway prize for Environmental Studies. In addition, a number of students have been awarded Oliver Scholarships, made to outstanding minority students for full tuition at private schools such as Dalton, Exeter and Choate Academies. Our acceptance rate is 70% for students who apply for entrance into the prestigious Bronx High School of Science and Stuyvesant High School. Mott Hall graduates have gone on to Harvard, Yale, MIT and other highly regarded private and public colleges and universities.

The Mott Hall School has been recognized by funding agencies, educators, government and the media. The School has been visited by educators and education students from Columbia University, City University, and the Bank Street College of Education. Technical assistance and staff development support, including training in portfolio assessment, curriculum restructuring and teleconferencing, have been offered by Bank Street, Teachers College and the Institute for Urban Education at Barnard College. Representatives from the New York City Mayor's office and the U.S. Congress and have visited, including Representative Charles Rangel, who placed a tribute to Mott Hall into the Congressional Record on April 19, 1991. WCBS-TV, *Crane's New York Business*, *The New York Times* and *Lear's* magazine have featured stories on the accomplishments of our students and staff.



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Dr. Mirian Acosta-Sing,
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Marc Briller,
Coordinator of
Enrichment Programs

The Mott Hall School
P.S./I.S. 223

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and Technology

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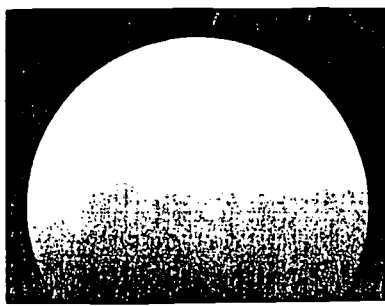
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C O M M U N I T Y

Youth Roles

NATIONAL HELPERS NETWORK, INC.

Exploring Connections Between Service and Work

In many middle schools and high schools throughout the country, the line between service learning and school-to-work programs is beginning to blur, as educators who recognize the natural connections between both efforts seek to make the most of shrinking resources. As a result, many schools have created hybrid programs that combine the best of both worlds to meet both career education and service learning goals for their students.

In the Mott Hall School in New York City's Harlem community, educators have developed just such a program, integrating the key elements of both service learning and career education to offer their students an intensive career development experience. A public school for gifted and talented students from the 4th to the 8th grade, Mott Hall engages all 8th graders in service activities at more than 25 sites throughout New York City, including day care centers, elementary schools, nursing homes, health centers and non-profit agencies. Students in the program learn the value of helping others and reaching out to the community, but also learn practical job *continued on page 6*

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FROM THE PRESIDENT

FINDING COMMON GROUND

On a recent visit to a bustling Head Start center in Central Harlem, I spent time with a group of adolescent Helpers from the nearby Mott Hall School who visit the center once a week to provide one-to-one attention to the preschool's youngsters. These 8th grade students are participating in a service program that stresses career preparation and places 100 students in 25 different agencies ranging from child care centers to the local community planning board.

In the five weeks before Helpers begin their service, community members and professionals from around the city visit the school to discuss workplace issues such as career planning, workplace conduct, and negotiating techniques. Students review job descriptions before accepting assignments. Many are interested in acquiring office skills such as telephone answering and filing. Yet most of the students to whom I spoke stressed that their service meant so much to them because they were "helping the community." It was apparent to these

NHN CALENDAR

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skills, work values and career options through classroom discussion, workshops, reflection and on-the-job experience.

"We want our students to be more aware of themselves, the world of work and the community around them," says program coordinator and teacher Eileen Simon. "By combining service learning and career education, we felt we could give students a more integrated and realistic experience."

This unique service learning program began in 1990 when Myrna Schiffman, a Health and Home Economics teacher at the time, started a service program in which students could volunteer to work in community agencies after school. The program was overwhelmingly popular; Approximately 75 out of 100 eighth graders signed up to participate. The success of Ms. Schiffman's community service program coupled with her long-held belief that schools should be playing a greater role in preparing students for work prompted her to combine the service activities her students were performing with a career education curriculum. The result is an intensive two-year career development program for all 7th and 8th graders at

"Class instruction is important, but when it comes to career education experience is key."

Eileen Simon, Mott Hall School

Mott Hall — one that combines classroom learning with real-world field experiences and fully integrates both into the school day.

In the 7th grade, all Mott Hall students take a full-year career development class. They explore various careers, learn how to find and apply for jobs, and discuss what skills are necessary to stay on the job once they get one. They write and design their own resumes, fill out job applications and social security forms, and take part in mock job interviews. They even learn subtleties like the art of a good handshake, maintaining eye contact and dressing for success.

While much of the course covers practical career development issues, Ms. Simon says that a fair amount of the discussion and activity centers around helping students develop a sense of their own values and a greater understanding of themselves. "When you learn about yourself, you have a better chance of finding the kind of job that suits

your needs and your personality," explains Ms. Simon, who assumed leadership of the program when Ms. Schiffman left Mott Hall.

To reinforce what they are learning in career development, 7th graders perform service on the school grounds, getting a first taste of what it's really like to take responsibility for a job and see it through to completion. They keep the school clean, assist teachers with administrative duties, perform clerical duties in the school office, and run errands within the school. "Classroom instruction is important, but when it comes to career education experience is key," says Ms. Simon. "If students can really sink their teeth into something, it is really so much more interesting to them. Then the personal experience becomes real knowledge."

Once these students enter the 8th grade, they are ready for the full career development program. The year begins with a series of workshops on job skills, workplace behavior,

and working with special populations such as young children, the disabled or the elderly. Many of the workshops are conducted by site personnel themselves, giving students insights into the specific skills that are needed in each of the available fields. Meanwhile, students are given a list of the participating agencies, the positions that are available, and the qualifications for each. Students are then asked to pick their preferred assignments, listing their top three choices. Once they are accepted for their individual assignments they receive further training in their specific jobs.

Throughout the school year, students visit their service sites once a week for two hours, during the school day. Students help tutor elementary school children in reading and other basic skills. They supervise play and arts activities at day care centers and assist disabled children with reading, vocabulary or art activities. Some students work in the offices of local non-profit organizations or local government officials, answering phones, filing, working on computers, or performing other clerical duties. For all of these students, their service assignments represent their first

real work experience and the first time they have ever been in a position of such responsibility.

In ongoing reflection sessions throughout the year, students continue to delve into issues they may confront in their service sites, such as communication problems, conflict resolution, constructive criticism, and the importance of gaining new skills. Students also keep a journal throughout the year. And while much of the emphasis is on work and careers, the program's goal of promoting a life-long appreciation for community service is not lost on students. All of the classes and reflection sessions stress the benefit of their work to the individual people they help and to the wider community. And the students themselves seem to respond to the emotional connections they form with the people at their sites. "The students really love this program," says Ms. Simon. "When the Helpers come into a preschool classroom and their little students come running to them all excited to see them, they are so satisfied. They know they are important to these little children and that's really wonderful to see."

At the end of the year, the students hold a luncheon and awards ceremony, honoring their site supervisors. Each student writes a sentence that captures their service experience and decorates it on a certificate of appreciation, which they frame and present to their supervisors. The event reinforces the fact that the placement site can "make or break" the service experience, as site supervisors are largely responsible for ensuring that students are engaged in meaningful service.

Ms. Simon believes that the active involvement of site supervisors is helpful for students because it gives them the chance to be with adults who are working and can serve as role models for good work values and practices. "I like my students to see what's involved in working, to gain an appreciation for what it means to work hard and to accomplish something," says Ms. Simon. "One of the most powerful ways to do that is to have them work alongside an adult who is willing to take an interest in guiding them." To that end, the school is considering a change in the program for next year. If the change is approved, 7th

graders would take over the 8th grade service jobs and 8th graders would be matched with mentors in businesses and institutions throughout the city. Students would visit their mentors at their workplaces and learn about their businesses and explore the connections that exist between the work world and school.

When she looks ahead for her students, Ms. Simon believes that the service learning program at Mott Hall will prepare them "to develop real skills that will prepare them to compete in the workplace of the future." ☉

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Info Alert

SERVICE LEARNING RESOURCES

PUBLICATIONS: Social Issues and Service at the Middle Level Edited by Samuel Totten and Jon E. Pedersen. Needham Heights, MA: Allyn & Bacon, 1997. A compendium of essays by middle level educators with a focus on "the study of social issues within the middle school curriculum and student involvement in service." Includes a chapter by Joan Schine and Alice Halsted.

That's My Buddy! Friendship and Learning Across the Grades Developmental Studies Center, Oakland, CA, 1996. A guide to a cross-age mentoring program that fosters a sense of community across grade levels in schools while offering important learning experiences. Also available in video. For information, call 800-666-7270.

ON THE WEB: Online Directory of Internships in Youth Development Developed and maintained by The National Assembly of National Voluntary Health & Social Welfare Organizations, the online directory describes thousands of internship opportunities in youth development agencies across the U.S. Search by state, city, or type of internship that matches a particular skill or interest. <http://www.nassembly.org/nonprofit> (Click on the "Internships" button).

EVENTS: Eighth Annual National Service Learning Conference "Coming Together to Create a Brighter Tomorrow," March 19 - 22, Orlando, Florida. For details, call 864-656-2599.

The Points of Light Foundation's National Community Service Conference, June 29 - July 2, 1996, New York City. For information, call the Conference Hotline at 202-223-5001.

To: Mark Briller

From: Susan Herzog

Re: The Mott Hall-CCNY STARS program (student apprenticeships in research) and School-to-Work Best Practices Award

1. Students are identified for the program by self-nomination. They complete a simple application in which they are asked why they want to participate in the program and why they think they would be good participants. Students are then chosen based on their desire to participate and also on their past year's performance on their science inquiry project. The members of this year's STARS group are not all the highest grade-achieving students in science, but all have shown a special interest in scientific inquiry.
2. This is only the beginning of the second year of the program and we have not yet tried to formally evaluate it. We do however, have some anecdotal evidence of increased interest in and a more realistic picture of science research as a career choice. There is also evidence for an improvement in the students' ability to communicate in a sophisticated way about science to their peers and to knowledgeable adults. An example of this was at last year's science fair when one of the judges remarked on the difference in ability to carry on an extended conversation about their project – between those students who had worked with scientist mentors and those who had not.
3. With respect to parents, we also have not yet elicited their impressions of the program in any coherent way. Parents must complete permission slips for the student's participation, which has really been the only written contact about the program. However, again anecdotally, most parents seem very appreciative that we are providing their children with this highly enriched opportunity to interact with scientists. This year Dean Simmons and I are planning a weekend meeting and tour of the college laboratory facilities for the STARS and their families.
4. The biggest challenges have been to find researchers who are able to communicate with the students about their work, at a level that the students can understand. We have also found that sometimes the difficulty of bridging the levels of understanding can be made even more difficult if the presenter has an accent which is somewhat difficult for the students to understand – since the language of science is already challenging. We have found that the students respond best to an informal rather than a more formal presentation, in which the presenters elicit from the students the level at which they understand an important science concept in their work and then build up from there with the students involved. We have also found that some researchers are concerned about safety and insurance issues that arise when pre-high school students are working in their labs. We are fortunate to be working with Gail Simmons who is an administrator who finds ways to eliminate barriers and facilitate common sense solutions. Finding a good partner at the institution, who has the power to enroll the help of the scientists, is the most important factor in getting this to work, I believe.
5. In addition, the teacher must always be an active "translator" between the scientists and the students – helping them to find a common level of communication. Left to themselves, the students, whether from shyness or politeness usually will not stop presenters when they don't understand them. They glaze over or become restless. Often, just a few words of explanation from the teacher, defining some new terms or linking a new idea to some concept that the kids already are familiar with gets the kids and presenters talking on a more level basis.

Editorial Notebook

The Battle for 'Gifted' Education

Public school programs for so-called "gifted" students have become an explosive issue in New York City. Many middle-class parents see gifted-student programs as safe havens in an otherwise mediocre system — and threaten to withdraw if the programs are weakened. Advocates for minority groups attack the programs for remaining overwhelmingly white, while the school districts from which they draw students have become largely black and Hispanic. This is not just a local problem. Nationally, black and Latino children make up about 27 percent of the school population, but constitute less than 13 percent of students in gifted programs. Impoverished children tend to be poorly prepared. But racial stereotypes sometimes make it difficult for teachers to recognize gifted minority students when they actually appear.

Partly to avoid a lawsuit, Schools Chancellor Rudy Crew has asked schools to improve access for minorities. This means de-emphasizing I.Q. tests — which tap a narrow range of mental abilities and involve strong cultural biases — while turning more toward multiple entry criteria, including achievement tests, writing samples and recommendations. Detractors argue that this would flood the programs with mediocre students. But the methods Dr. Crew seeks have already proved successful, most notably at the Mott Hall school for talented students in math, science and technology.

Most people imagine a lavish edifice, chock-full of high technology. But Mott Hall, in Harlem, is timeworn and frightfully small. The school houses 410 students — in grades four through eight — but has neither gym nor playground. What the school lacks in books, computers and space, the teachers make up for in creativity and esprit de corps.

With a student body that is 99 percent black and

A School in Harlem Offers a Solution

Hispanic, drawn mainly from upper Manhattan, Mott Hall has consistently ranked among the most distinguished public schools in New York — and the country. Its chess

team won the national chess championship in 1994 and 1995, and missed it by the narrowest of margins last year. About 70 percent of Mott Hall's students who apply will gain admission to exclusive public high schools like Stuyvesant and Bronx Science. Many of the rest will end up at elite boarding schools like Choate, Exeter, Andover, Deerfield and Westtown.

Mott Hall searches its neighboring schools for children who don't just test well but are persistent and aggressive learners. The school's guidance counselor says that students who are accepted on test scores alone tend to do poorly. First the students must reach the 80th percentile on the citywide math and reading tests. They then take Mott Hall's own math and writing tests, undergo interviews and seek recommendations from two teachers at their home schools. After a decade of sending children to Mott Hall, the teachers have learned what to look for. Their recommendations have become the most valuable predictors of success.

The faculty and students pay a price for excellence. Fearing harassment from rival schools, Mott Hall's students refrain from clothing that bears the school's name. Asked what school they attend, the students forsake the given name and use its number — Public School 223. The principal, Dr. Mirian Acosta-Sing, underplays the school's gifted status when seeking grants from foundations — which tend to focus on remedial needs, thinking that the gifted are self-sufficient.

Instead of criticizing the school, the system needs to emulate it. If Mott Hall can find gifted students in New York City's toughest neighborhoods, other schools can too.

BRENT STAPLES

NY Times Editorial Page 5/3/97

**The Mott Hall School
for Advanced Studies in
Mathematics, Science & Technology
West 131 Street & Convent Avenue
New York, New York 10027**

Dr. Mirian Acosta-Sing
Principal

Steve Buchsbaum
Assistant Principal

THE NEW YORK TIMES OP-ED SUNDAY, NOVEMBER 7, 1993

Public & Private

ANNA QUINDLEN

*Dumb
About
Smarts*

Mirian Acosta-Sing has a problem. She's the principal of a New York City public school, a school whose students are almost entirely black and Latino, with income levels low enough to qualify for free lunches, in a neighborhood in which fifth and sixth graders are importuned by dealers to take lucrative work as drug runners.

But Dr. Acosta-Sing's problem is not what you might imagine. She runs the Mott Hall School in Washington Heights, whose 450 students, grades four through eight, are all gifted and talented. And all she has to do is mention those two words to be written off for state funds, grant programs, most kinds of additional aid.

"We tell the children they should be proud of their abilities," she says. "But I have to camouflage the fact that these are academically accelerated kids when I write proposals. Because all the focus now is on remediation."

There's no news for the administrators and teachers at Mott Hall, or for many others who work with smart kids, in the report issued last week by the Department of Education that says the United States gives its brightest children short shrift. The report notes that smart kids are not being challenged in public school classrooms, that little money is spent on curriculums designed for their special needs and that stereotypes of nerds, geeks, and dweebs make many shy away from being identified as gifted and talented.

With the emphasis on poor performance, on kids who aren't learning, on low reading scores, there has developed a policy of ignoring the ablest students, what Dr. Acosta-Sing calls the "they can take care of themselves" approach. The result is that bright American children learn less than their peers around the world, particularly in math and science.

And the systemic failure is a reflection of an old established societal one that is horribly confusing to kids of all stripes. They move through the hallways of America's public schools, learning every day the lesson that to be cool is all there is of life. No wonder they feel scammed when, at 30, the requisites for success are so much greater, and so much different than that.

Mott Hall has the largest number of children reading at or above grade level of any middle school in New York City. Yet when the eighth grade started a T-shirt business, the kids demurred at putting the school name on the product. "They said if they wore it in the community, they would be ridiculed," Dr. Acosta-Sing said.

That's so unfair. But it's ultimately more unfair to the other kids, who learn to value dress over gold. When they think of making it, getting rich, hitting the big time, the venue is pro sports or record contracts. The ability to pass a ball through a hoop

generates reams of prose and publicity, and millions in commercial endorsements.

But we still haven't discovered a way to tinsel up the ability to pass a theory through a set of complicated proofs, to make a Nobel as seductive as a Grammy. The future is built on brains, not prom court, as most people can tell you after attending their high school reunion. But you'd never know it by talking to kids or listening to the messages they get from the culture and even from their schools.

American education has been so preoccupied with remedial courses and so opposed to tracking in recent years that it has participated in the charade. In one survey, only 2 cents out of every \$100 spent on public school education was spent on programs for talented students.

The Department of Education report concludes that the problem is particularly acute in poor neighborhoods, where the educational focus is so often on failure. Mott Hall kids go on to some of the nation's best high schools, and the Ivy League. In a neighborhood in which long division can mean cutting up a kilo of coke and subtraction is sometimes time off for good behavior, this is an everyday miracle.

Yet these are the kids who don't want their school name on their shirts. This is the school whose principal says "I'm looking for a millionaire" because she despairs of getting more money from a system obsessed with its potential failures to the detriment of its potential successes. And this is a system the Department of Education concludes is neglecting the best as a matter of course. Dumb, dumb, dumb. Just dumb. □

A public
school policy
that ignores
our brightest
kids.

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Congressional Record

A+ STUDENTS

HON. CHARLES B. RANGEL

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

Thursday, April 18, 1991

Mr. RANGEL Mr. Speaker, I am honored to call to your attention the endeavors and successes of a remarkable school in the 16th Congressional District P.S./I.S. 223, also known as the Mott Hall School.

Each year, New York City's 620 public schools compete in a reading examination. For the past 3 years, Mott Hall students have won first place. And this year, they did it again—with a 100-percent reading record at or above grade level.

Surely, there is a winning streak that any student would envy. Upon closer examination, it is nothing short of remarkable. The students at Mott Hall, you see, have not had it so easy. Over half of them come from families that live in poverty. Some have only recently arrived in the United States; the English that they read so masterfully is not even their native language.

How then have these students so consistently performed with excellence? Because they could.

My district, Mr. Speaker, teems with youth like those in Mott Hall—children filled with promise and hope, bursting with the desire to achieve something with their lives. Yet tragically, society seems to tell them that they cannot achieve, that they have no opportunity, that they need not even try to come in first place.

Mott Hall students try—and they succeed.

Mott Hall is a school committed to excellence in mathematics, science, and technology—a commitment that its students make good on every day of the week. The school staff, a group of highly and dedicated professionals led by the inspiring principal, Mirian Acosta-Sing, encourages students to integrate their assigned subjects and pursue independent and creative projects.

The teachers' hard work pays off. Mott Hall students are models of diligence, who are regularly accepted at elite prep schools. They leave Mott Hall confident of their abilities and committed to their communities.

These 425 youngsters in grades 4 through 8 know that they are in a special place, and they work hard to keep it that way. They involve their parents in their schoolwork, and even have them sign a pledge to provide a quiet workplace and after-school assistance. They work with the community, reclaiming parks from drug abusers and weeds, serving in homes for the elderly, and tutoring younger students to show them that they, too, can succeed if only they try. And above all, they study—and study hard.

Four years, four top placements in reading. It is indeed wonderful news, but when one thinks about it, not all that surprising. As Mirian Acosta-Sing tells her students, "I knew you could do it."



United States
of America

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Nothing succeeds like success

I was thrilled by your April 12 story about the endeavors and successes of a remarkable school in the 16th Congressional District: P.S./I.S. 223, also known as the Mott Hall School.

Each year, New York City's 620 public schools compete in a reading examination. For the past three years, Mott Hall students have won first place. And this year, they did it again — with a 100 percent reading record at or above grade level.

Surely theirs is a winning streak that any student would envy. Upon closer examination it is nothing short of remarkable. The students at Mott Hall, you see, have not had it so easy. More than half of them come from families that live in poverty. Some have only recently arrived in the United States; the English that they

read so masterfully is not even their native language.

How, then, have these students so consistently performed with excellence? Mott Hall students try — and they succeed. In doing so, they learn the greatest lesson of all: that they are capable of the best. Four years, four top placements in reading. It is indeed wonderful news, not all that surprising. As principal Mirian Acosta-Sing tells her students, "I knew you could do it."

Such a simple sentence, only six short words. Let's try to tell it to the students of New York City every day.

Rep. CHARLES RANGEL, Manhattan

WRITE: The Editor, New York Post, 210 South St., New York, N.Y. 10002. Please sign your name and include your address. No unsigned letters will be published. The Post reserves the right to edit and condense all letters.

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CRAIN'S NEW YORK BUSINESS

MAY 22, 1989

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BUSINESS & SCHOOLS: SUCCESS STORIES

Mentor program in its 7th year with 80 companies



Banking on the future: The seventh grade advanced pre-algebra class at the Mott Hall school in Harlem, Morgan Stanley & Co. executives helped the class create a cookbook that they're now selling.



BY THERESA AGOVINO

CRAIN'S NEW YORK BUSINESS

Investment banking isn't child's play, especially when you're in the seventh grade.

After spending four months learning the basics of the business from three young associates at Morgan Stanley & Co., Class 7-111 at Mott Hall, a school for gifted children, is primed to present its final project to the trio. The children must convince the associates to purchase for resale 100 copies of *Paradise on a Platter*, a cookbook the bankers helped the class turn into an actual tome with a bright yellow cover and a \$7.95 price tag.

The youngsters have organized a presentation featuring a slide show outlining their efforts so far, worked out a discount for the bankers and even prepared four recipes from the book.

"I think they'll buy," says Adasme Gonzalez, a confident 12-year-old, adding that she supplied the recipe for the pumpkin loaf that will be served at the presentation.

After much haggling the bankers—Darryl Thompson, W. Kimathi Marangu and Daniel R. Mintz—do buy, but only after the students agreed to discount the book 8.8% rather than the measly 3.7% cut they offered originally. In return, the bankers agree to pay the students \$1 for each book they sold over 100, and they put all the details in what was probably the first handwritten contract in Morgan Stanley's history. "You guys are really playing hardball," Mr. Mintz says.

Sessions similar to this one in Harlem are taking place throughout the city as the New York Alliance for the Public Schools' Mentor Program winds up its seventh year. Dedicated to raising students' aspirations by exposing them to careers they might otherwise not even have known existed, the program this year encompassed 80 companies and 1,600 students. The professions involved now include law, advertising, teaching, engineering, public relations and investment banking.

But the Mentor Program's success comes amid much uncertainty afflicting the public schools. Chancellor Richard Green, who died the same week that the Morgan Stanley bankers struck their deal with class 7-111, helped boost increasing involvement in the schools by the city's business community. Observers hope that his successor will support business-school partnerships as enthusiastically.

However, Barbara Probst, the executive director of the alliance, says his death won't affect the mentor effort because it is run independently of the Board of (Continued on Page 11)

Business and city schools: One success story

From Page 3

Education. She maintains it will continue to be a success because it doesn't require a company to tackle the problems of an entire school or to spend vast amounts of time and money. She asks companies to provide children with executive role models, particularly minorities.

Playing a role

"It is important to show kids that there are blacks and other minorities doing interesting things so they know they can do them too," says Kevin Griffith, an associate at First Boston, who with two colleagues is teaching financial principles to seventh and eighth graders in the Bronx. Mr. Griffith, who is black and grew up in the Brownsville section of Brooklyn, adds, "I don't care if the kids remember what a diluted earnings per share means. I want them to remember the Park Avenue office and the big board room. I want them to know that if they stay in school and work hard, there are opportunities available to them."

The executives broaden the children's horizons by describing

their responsibilities and those of their colleagues. Often, the volunteers take classes on field trips so they can witness business in action and most importantly, they point out practical applications of education to encourage the kids to stay in school. For example, the Mott Hall class used their algebra skills to find their book's break-even point.

The professionals involved in the program, begun in 1982 by attorney Tom Evans, say it doesn't demand too much of their time and the enthusiastic response of the children makes it worthwhile.

"It was so much fun," says Luz Cullen, an assistant account executive at Manhattan's Cohn & Wolfe, who worked with students preparing a public relations campaign for a new sneaker. "The kids' enthusiasm is infectious."

The enthusiasm is a two-way street. Youngsters involved in the program say working with professionals gives them an extra incentive to do well on their projects.

Students in the law internship spend the semester preparing to participate in a moot court proceeding where all the schools try the same case, and one is eventually crowned city champ. Seth

Wolchok says he and his classmates at Curtis High School in Staten Island, this year's winner, wanted the title as much for themselves as for the lawyers at Mudge Rose Guthrie Alexander & Ferdon that helped them win.

"The lawyers really worked hard for us and kept on encouraging us," says Mr. Wolchok, a 17-year-old senior. He adds the class was instrumental in helping him to decide that he wanted to pursue a career as an attorney.

In other cases the impact was not as profound but still useful.

"It was really interesting, and the guys made us laugh," says Caroline Gonzalez, a 13-year-old at Mott Hall. "I want to be an ecologist, but this class helped me learn how to invest money."

Career counseling

Career counseling is not the main objective of Mentor, but several concerns have become involved in the hopes of luring students into their ranks. Meanwhile, other firms have fortified the program by offering jobs, expanded internships, and after-school clubs to truly interested students.

"There is a definite problem recruiting people to the health field, and it's not just nurses," says

"The program lets us bring math and science into a favorable light," says Leonard Gulotta, an engineer at the firm. "And the club gives the kids more career direction so when they get to college they can avoid some of the indecision."

Mr. Gulotta says he especially enjoys Mentor since he is a product of the New York City school system.

"I came out all right," he says. "So I want the kids to know they can make something of themselves too."

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Marjorie Heide, career development manager for New York Hospital, "We want to spread the gospel about how good it is to work in health care, and I think this helped get the message out."

Engineers from Sykes & Hennessy Inc. were so pleased with the reaction they received from the seventh graders they worked with in the Mentor Program that they started a club for eighth graders at the school.

What is the National Helpers Network?

Since 1982, the National Helpers Network has worked to engage young people in service activities in their communities, giving them the chance to develop and apply new skills, try out adult roles and reflect on their experiences in order to learn from them. The Network provides a variety of supports to schools, youth programs, and community organizations interested in creating quality service learning programs, including program models, training and assistance, publications, research and curriculum resources.

Cited by the Carnegie Council on Adolescent Development in its landmark studies "Turning Points" (1989) and "Great Transitions" (1995) for its model of youth development, the Network is a national leader in the service learning movement, supporting **6,000 adolescents in 50 Helper Programs** around the country.

Who are Helpers?

Helpers are young people who use their knowledge, skills, energy and idealism to make their schools and neighborhoods better places to live. Helpers tutor elementary school students, work in preschool and Head Start classrooms reading to children and leading play activities, visit elderly "partners" in nursing homes, clean and beautify parks and other public places and develop creative solutions to community problems.

How the Network Operates

Network staff provide expert training, assistance and on-site guidance to schools and youth serving agencies around the country. First, prospective program leaders attend a faculty workshop to help them determine if their institution is ready to support a service program. Then, using curricula developed by the Network, practitioners establish their overarching goal, which is the *raison d'être* for their service program and approach. Staff then work with a team at the school or agency, demonstrating classroom techniques, modeling reflection seminars and consulting with program leaders.

What are the Network's Models?

♦ **Learning Helpers:** Helpers work with youngsters in elementary schools or after school settings, supervising play periods, working on arts and crafts, reading aloud and providing homework help. Students from A. MacArthur Barr Middle School in Nanuet, New York serve as teachers' assistants at a local child care center, supervising children's play and assisting with lunch.

♦ **Partners Program:** An intergenerational program, *Partners* is designed to reduce the isolation of elders and adolescents and to break down their stereotypes and fears based on age and culture. For example, students from South Bend, Indiana's middle schools partner with seniors from Holy Cross Health Service's long-term care facilities.

♦ **EnviroHelpers:** Helpers translate environmental concerns into concrete community action by learning what it takes to maintain a life-sustaining environment and the powerful effect that working together can have. For example, students at PS. 272 in Brooklyn work in partnership with Brooklyn Botanical Gardens and Green Thumb to beautify their school grounds and other community sites.

♦ **Community Problem Solvers:** Helpers undertake a community study, select a problem

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they wish to address and, with adult supervision, design and implement a response. For example, teens at the Girls, Inc. in Lynn, Massachusetts pitched in to clean up a neighborhood park, removing litter and painting over graffiti.

♦ **Common Ground/Common Purpose:** The newest Helper model, this program is based upon our belief that the most effective way to overcome prejudice and racism is to foster open communications and understanding. An adaptation of our *Community Problem Solvers* approach, it brings diverse groups of young people together to work toward a common goal. Thurgood Marshall Middle School in Chicago linked with rural North Middle School in Mt. Carmel, Illinois to offer a chance for students from different socioeconomic and ethnic groups to work together to address drug abuse in their respective schools.

♦ **Student Evaluators:** Empowering students is the centerpiece of this model, through which students, with the help of a Network-trained facilitator, develop a research design, collect data, tabulate results and offer recommendations for the future of a project in which youth are engaged. For example, students from Junior High School 185 in Queens now evaluate their own peer tutoring service learning programs. Their recommendations, including the need for more trainings before they begin tutorial sessions, have been incorporated into the permanent program design.

Publications

The Network is a national leader in innovative service learning materials:

- ♦ *Community Youth Roles*, our national newsletter with a readership of more than 6,000
- ♦ *Community Reflections*, a newsletter for Helper Program Leaders
- ♦ 12 field-tested curriculum guides for implementation and reflection
- ♦ *New in '98:*

Reflection: The Key to Service Learning 2nd edition presents the rationale for the necessity of reflection in service learning and provides a host of activities to make reflection fresh and inviting for students.

EnviroHelpers which offers opportunities for adolescents to address environmental issue in their communities within the context of a quality service learning framework.

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